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§ Title:

JP10015388A2: CATALYST FOR HYDROGENATION REACTION, ITS MANUFACTURE, AND HYDROGENATION REACTION USING THE C

JP Japan

ହ Kind:

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KUSAKA HARUHIKO; TAKAHASHI HIROKO; YOKOTAKE ICHIRO;

Assignee:

MITSUBISHI CHEM CORP

News, Profiles, Stocks and More about this company

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C07C 31/20; C07B 61/00; C07D 307/08;

**Priority Number:** 

June 28, 1996 JP1996000169428

PROBLEM TO BE SOLVED: To provide a catalyst having metals carried on a carbonaceous carrier with the metals carried uniformly even in the inside of the carrier, a process of producing the same, and particularly a process of producing 1,4-butanediol and/or tetrahydrofuran with a high efficiency in a high yield under relatively mild reaction conditions by a catalytic hydrogenation reaction wherein, as a raw material, maleic anhydride, maleic acid, succinic anhydride, succinic acid, y-butyrolactone, or a mixture thereof is used.

SOLUTION: There are provided a catalyst having carrying components produced by combing at least one metal selected from among Group VIII metals of the periodic system, and as required, at least one element selected from among the elements of Groups IIIa, IVa. Va. Vla. Vlla. Ib, Ilb, IIIb, IVb, Vb, and Vlb, and deposited by impregnation of solution of 5C or lower carboxylic acid or a 5C or lower carbonyl compound into a carbonaceous carrier, and further provided a process of producing the same, and a process of the hydrogenation reaction of carboxylic acids by using the catalyst.

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🕏 Family:

None

References:

PDF	Patent	Pub.Date	Inventor	Assignee	Title

## CATALYST FOR HYDROGENATION REACTION, ITS MANUFACTURE, AND HYI... Page 2 of 2



<u>US6294703</u> **2001-09-25** 

Hara; Yoshinori Mitsubishi Chemical Company Process for the manufact cycloalkyldimethanol

**VOther Abstract Info:** 

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(71) Applicant: MITSUBISHI CHEM CO

(72) Inventor: KUSAKA HARUHIKO TAKAHASHI HIROKO YOKOTAKE ICHIRO

(74) Representative:

(54) CATALYST FOR HYDROGENATION REACTION, ITS MANUFACTURE, AND HYDROGENATION REACTION USING THE **CATALYST** 

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a catalyst having metals carried on a carbonaceous carrier with the metals carried uniformly even in  $\epsilon$ the inside of the carrier, a process of producing the same, and particularly a process of producing 1,4-butanediol and/or tetrahydrofuran with a high efficiency in a high yield under relatively mild reaction conditions by a catalytic hydrogenation reaction wherein, as a raw material, maleic anhydride, maleic acid, succinic anhydride, succinic acid, γbutyrolactone, or a mixture thereof is used.

SOLUTION: There are provided a catalyst having carrying components produced by combing at least one metal selected from among Group VIII metals of the periodic system, and as required, at least one element selected from among the elements of Groups IIIa, IVa, Va, VIa, VIIa, Ib, IIb, IIIb, IVb, Vb, and VIb, and deposited by impregnation of solution of 5C or lower carboxylic acid or a 5C or lower carbonyl compound into a carbonaceous carrier, and further provided a process of producing the same, and a process of the hydrogenation reaction of carboxylic acids by using the catalyst.

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